Complete Summary

GUIDELINE TITLE

Changing the practice of physical restraint use in acute care.

BIBLIOGRAPHIC SOURCE(S)

Park M, Hsiao-Chen Tang J, Ledford L. Changing the practice of physical restraint use in acute care. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation and Dissemination Core; 2005 Nov. 47 p. [146 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Ledford L, Mentes J. Restraints research-based protocol. In: Titler MG, editor(s). Series on evidence-based practice for older adults. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 1997 Sep. p. 83.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Behaviors that may place patients at risk for restraint use, including:

- Interference with therapy
- Fall risk
- Agitated/restless behavior
- Wandering/elopement behavior

- Cognitive impairment

GUIDELINE CATEGORY

Evaluation
Management

CLINICAL SPECIALTY

Geriatrics
Nursing

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To assist nurses and other health care professionals in changing the practice of physical restraint use for elderly patients (older than age 60) in acute care settings
- To assist health care professionals to:
    - Move toward restraint-free care
    - Assist those settings that still employ restraints to do so in the safest and least restrictive manner possible while moving toward restraint-free care
- To avoid restraints rather than to apply them with any clinical justification

TARGET POPULATION

Elderly patients (older than age 60) in acute care settings

Note: Patients in psychiatric wards, intensive care units (ICU) or acute rehabilitation settings, and pediatric acute and long-term care settings are also increasingly recognized as being at risk for use of physical restraints, but care in these settings is not addressed in this guideline.

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation

1. Comprehensive assessment including:
    - Identification of patient behaviors
    - Identification of triggers or contributing factors including review of patients health history and health care record
    - Evaluation of medication use
    - Assessment of functional, mental, psychological, and environmental status

Management

Institutional Approaches

1. Establish a restraint elimination committee
2. Adopt formal mission/philosophy statements and policies
3. Use expert consultation
4. Provide staff education
5. Ensure adequate nursing staff
6. Test and evaluate patient interventions

Individual Approaches

1. Physical/physiological approaches
    - Change or eliminate bothersome treatments
    - Provide physical activities to diffuse and divert patient behaviors
    - Use reality-orientation and other psychosocial interventions
    - Provide one-on-one companionship and constant observation
2. Psychological approaches
    - Involve family to participate in care
    - Provide familiar people, things, and activities
3. Environmental modifications
    - Modify the immediate environment

Use of Restraints

1. Standards for use of restraints
2. Observation and documentation of use of restraints

MAJOR OUTCOMES CONSIDERED

Restraint use

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The grading schema used to make recommendations in this evidence-based practice guideline is:

A. Evidence from well-designed meta-analysis
B. Evidence from well-designed controlled trials, both randomized and nonrandomized, with results that consistently support a specific action (e.g., assessment, intervention, or treatment)
C. Evidence from observational studies (e.g., correlational, descriptive studies) or controlled trials with inconsistent results
D. Evidence from expert opinion or multiple case reports

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Experts in the subject of the proposed guideline are selected by the Research Translation and Dissemination Core to examine available research and write the guideline. Authors are given guidelines for performance of the systematic review of the evidence and in critiquing and weighing the strength of evidence.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This guideline was reviewed by experts knowledgeable of research on Restraint Use, Restraint Free Environments and development of guidelines. The reviewers suggested additional evidence for selected actions, inclusion of some additional practice recommendations, and changes in the protocol presentation to enhance its clinical utility.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The grades of evidence (A-D) are defined at the end of the "Major Recommendations" field.

Assessment Criteria

Key to the success of restraint-free care is understanding patient behaviors and their underlying meaning. It is generally accepted that all behavior has meaning, and that understanding this meaning is essential to effective nursing care (Martin, 2002). A comprehensive assessment, whenever possible, is most beneficial for the care of elderly patients with specific behaviors. This is done to determine the meaning of the behavior, to possibly diagnose its cause(s), and to develop an appropriate response to the behavior. Better understanding of the reason for behavior can lead to individualized interventions that eliminate restraint use while maintaining patient safety (Cotter & Evans, 2003; Sullivan-Marx & Strumpf, 1996).

Identify Patient Behaviors

The following behaviors place a patient at risk for restraint use and indicate an urgent need for comprehensive assessment (See Appendix A in the original guideline document for assessment tools) (Dunbar et al., 1996; Hancock et al., 2001; Hantikainen, 1998; Kolanski et al., 1998; Martin, 2002; Sloane et al., 1998; Zisselman et al., 1998. Evidence Grade = B).

- Interference with therapy
- Fall risk (restraints do not prevent patients from falls or related injuries)
- Agitated/restless behavior
- Wandering/elopement behavior
- Cognitive impairment

Identify Triggers or Contributing Factors Underlying Behaviors

Systemic approaches are required to assess patient behavior and the message in the patient's behavior. Once the behavior is understood, underlying needs can be addressed (Strumpf & Evans, 1998; Sullivan-Marx & Strumpf, 1996). For example, a patient who climbs out of bed and subsequently falls may be placed in restraints. A better understanding of the reason why this patient climbs out of bed (for example, trying to get to the bathroom to urinate), based on a thorough assessment, can lead to individualized interventions that meet the patient needs (e.g., implementing a regular toileting round). The following criteria should be included in the assessment of patient behavior:

- Understand the message in the patient's behavior by directly asking the patient what s/he wants/needs or asking knowledgeable others such as family or staff from prior institution if patient is unable to communicate (Cotter & Evans, 2003).
- Review the patient's health history and health care record. Assessing the patient's history is critical to determining how past events and coping and behavior patterns contribute to identified behaviors. Evaluation of current physical and cognitive status can be helpful in finding the underlying reason for certain behaviors and unmet needs. For example, behaviors such as slapping and screaming may be related to undetected painful conditions (e.g., hairline wrist fracture). Local infections such as cystitis or discomfort from conditions such as constipation or ingrown toenails can be factors. Depression may result in withdrawn behaviors and the depressed patient may also appear confused, apathetic, or resistant to care (Berland et al., 1990; Martin, 2002; Swauger & Tomlin, 2000. Evidence Grade = C). Assessment of the patient's health history and health care record should include the following data:
    a. Preadmission/admission/transfer notes
    b. Current plan of care
    c. Progress notes
    d. Physician orders
    e. Recent diagnostic tests
    f. Incident reports
    g. Consultation reports
    h. Conditions related to specific behaviors (e.g., infection, dehydration, drug toxicity, pain, depression).
    i. Dialogue with the transfer nurse and/or family
- Evaluate medication usage, which can contribute to cognitive dysfunction, movement disorders, and falls (Beers, 1997; Borchelt & Horgas, 1994; Catterson, Preskorn, & Martin, 1997; Monane & Avorn, 1996; Oxman, 1996; Phillips et al., 2000; Swauger & Tomlin, 2000. Evidence Grade = B):

    a. Age and weight-appropriate dosages of medications
    b. Determine if there is a current medical reason for the use of any psychoactive medications including antipsychotics, hypnotics, and/or anxiolytics; if not, reduce or discontinue the drug as appropriate.
    c. Evaluate lab-test results for toxic and therapeutic ranges.
    d. Review potential drug interactions. Consult pharmacists as appropriate.
- Assess the patient's functional status which can affect safety and self-care ability, including (DeSantis, Engberg, & Rogers, 1997; Liukkonen & Laitinen, 1994; Martin, 2002; Sullivan-Marx, 2001, Swauger & Tomlin, 2000. Evidence Grade = C):

    a. Ambulation
    b. Transfer
    c. Bathing
    d. Continence/toileting
    e. Dressing/grooming
    f. Feeding
- Assess as many aspects of the patient's mental status as possible, including (Castle, Foegl, & Mor, 1997; DeSantis, Engberg, & Rogers, 1997; Hancock et

al., 2001; Helmuth, 1995; Ludwick, 1999; Ludwick & O'Toole, 1996; Martin, 2002; Sullivan-Marx, 2001; Sullivan-Marx et al., 1999. Evidence Grade = C):

a. Orientation (person-place-time orientation)
b. Attention (the ability to focus in a sustained manner on one activity)
c. Speech (the use of language to express ideas and thoughts)
d. Judgment (the ability to recognize situations and to apply the correct response)

- Assess the patient's psychological status, including (Hancock et al., 2001; Lamb et al., 1999; Martin, 2002; Rader & Tornquist, 1995; Swauger & Tomlin, 2000; Talerico et al., 1995. Evidence Grade = C):

a. Communication ability (this can also be affected by the physical status as per past cerebral vascular accident [CVA])
b. History of psychiatric illness
c. Substance abuse
d. Support system
e. Coping strategies
f. Stress
g. Emotional status: fear, anxiety, regrets, depression, grief, denial

- Assess the environment, including (Coble & Davis, 2001; Dunbar & Neufeld, 2000; Dunn, 2001; Evans, 1996; Hakim, 1998; Hewawasam, 1996; Mion, 1996; Rader & Tornquist, 1995. Evidence Grade = C):

a. Noise levels
b. Lighting
c. Floor surfaces
d. Design/suitability of equipment and furniture
e. Visual cues
f. Barriers to mobility
g. Space for privacy and socialization
h. Clothing

In summary, rather than using restraints, nursing staff should determine the source of the person's behaviors through comprehensive assessment, and try to detect patterns. Reasons for patient behavior include response to a physical stress (e.g., hunger, pain, need to toilet, fatigue due to sleep deprivation) or a physiological change (e.g., an acute physical illness such as infection or delirium). For example, patients may become agitated/combative in late morning, suggesting hunger may be a contributing factor. This involves careful analysis of the reasons for the patient's behavior based on physical, environmental, psychological, and physiological factors. It is important to collect detailed transfer information (e.g., how the patient normally communicates and usual patterns) from those who know the patient well, i.e., family or staff from prior institution/setting. The patient may be taking medications that alter his/her level of consciousness, such that he/she is unable to understand the risks associated with certain behaviors. Underlying cognitive impairment may predispose the patient to acute confusion and recognition of this cognitive vulnerability provides the clinician an opportunity for early identification and possibly correction of the cause. Look for treatable and reversible causes of behaviors (e.g., infection, dehydration, and sensory deficits). If the patient's history and present status suggest that restoration of health and functional status can be made, efforts

toward that goal should be instituted immediately. Other possibilities, especially for patients with some degree of cognitive impairment, include environmental stress (e.g., over-stimulus or under-stimulus, or a change in caregivers or routine), or the patient is experiencing excess demand (e.g., is unable to meet the requests of care providers or family, or expected activity is beyond capacity).

Description of the Practice

The current standard of care is restraint-free. The intent of this guideline is to assist health care professionals to move toward restraint-free patient care; and to apply physical restraints properly when they become unavoidable. The goal of this evidence-based practice guideline remains to avoid restraints rather than to apply them with any clinical justification.

Intervention to achieve a restraint-free patient care environment includes two components: a) institutional approaches to create a restraint-free culture, and b) individualized approaches to care. In addition, a component on the use of physical restraints is included in this guideline to provide guidance for those settings that still employ restraints. These components and approaches to implementing interventions are discussed in subsequent sections.

Institutional Approaches to Create a Restraint-Free Care Culture

Strong administrative support is essential for a restraint-free culture (Capezuti, 2004; Jensen et al., 1998; Lusis, 2000). Institutions need to assess and modify their philosophy, policies, staffing, interdisciplinary collaboration, and staff education to support a restraint-free care environment (Dunbar et al., 1996; Jensen et al., 1998; Levine, Marchello, & Totolos, 1995; Mion et al., 1996; Shalden, 1991; Stratmann et al., 1997; Williams et al., 2004. Evidence Grade = D).

- Establish a restraint elimination committee, taskforce, or team to oversee the institutional restraint policy, participate in educational activities, and implement the restraint elimination program (Cotter & Evans, 2003; Levine, Marchello, & Totolos, 1995. Evidence Grade = C).
- Adopt formal mission/philosophy statements and policies that commit to promoting a restraint-free care environment (Jensen et al., 1998; Lusis, 2000; Minnick & Leipzig, 2001; Sullivan-Marx & Strumpf, 1996. Evidence Grade = C). The formal institutional mission and policy document should include information such as the commitment to comply with quality of care and policy standards, support for an individualized approach to patient care, and organizational structure to facilitate a restraint-free environment (Sullivan-Marx & Strumpf, 1996. Evidence Grade = D).
- Use expert consultation, such as advanced practice nurses and interdisciplinary team (e.g., nurses, physicians, administrators, social workers, physical/occupational therapists, and pharmacists) if needed for individual patient assessment. Studies suggest that achieving restraint-free care may require interventions guided by an advanced practice nurse such as gerontologic nurse specialist (Evans et al., 1997; Sullivan-Marx et al., 1999; Talerico, Evans, & Strumpf, 2002. Evidence Grade = C).
- Provide staff education. Studies have demonstrated the importance of staff education in interventions to promote successful restraint-free care programs

(Cruz, Abdul-Hamid, & Heater, 1997; Evans et al., 1997; Jensen et al., 1998; Martin, 2002; Mayhew et al., 1999; Si, Neufeld, & Dunbar, 1999; Smith et al., 2003; Strumpf et al., 1998; Werner et al., 1994; Evidence = C). Examples of staff education programs include the following:
    - Restraint-free practices philosophy and standards
    - Information about erroneous beliefs or myths about physical restraints
    - The impact of physical restraint
    - Legal and legislative aspects of restraint use
    - Alternative interventions to restraint use
    - Presentation of case studies or scenarios
- Ensure adequate nurse staffing and provide consistent patient assignments to the extent possible. Assigning the same staff supports nurse-patient relationships, helps staff to know the patient better, and provides individualized care (Dunbar & Neufeld, 2000; Forrester et al., 2000; Sweeney-Calciano, Solimene, & Forrester, 2003. Evidence Grade = C).
- Test and evaluate patient interventions through a continuous quality improvement (CQI) approach (Cotter & Evans, 2003; Jensen et al., 1998. Evidence Grade = C). Continuous monitoring and evaluation of restraint-free care is critical to the success of this effort.

Individualized Approach to Care

An individualized approach to care is the best method to achieve restraint-free care (Sullivan-Marx, 2001. Evidence Grade = C). Such an approach is based on the principles that all behavior has meaning and understanding that meaning is essential to addressing patient needs. And, as noted earlier, the best means to respond to patient behavior is through a comprehensive assessment, intervention, and evaluation. Figure 1 in the original guideline document provides a conceptual framework and displays a decision making process health care professionals can follow to better understand and respond to patient behaviors (Fletcher, 1996; Martin, 2002; Ortiz-Pruitt, 1995). The decision process starts with identifying behavior that places patients at risk for restraint use, such as the risk for falls, wandering, and/or interference with treatment devices. Through careful observation and assessment, nurses can understand the characteristics of the behaviors and any potentially harmful effect of the behaviors to self or others. The second step is to identify meaning or reasons for the patient's behavior based on physical, physiological, psychological, and environmental factors, as described in the "Assessment Criteria" section (See page 8 in the original guideline document). The third step involves implementation of interventions designed to eliminate potential causes of the behavior and try to meet the patient's unmet needs. For instance, administer medication for better pain management, turn off the TV to reduce noise level, or provide bedside commode to toilet. The last step is to evaluate effectiveness of the nursing interventions. If the interventions are effective, document them in the patient's medical record. If not, try additional interventions and evaluate their effectiveness until the patient's needs are met.

Specific restraint-free care interventions, including physical/physiologic and psychosocial approaches, environmental modifications, and related protocols (Sullivan-Marx, 2001), are described below.

Physical/Physiologic Approaches

- Change or eliminate bothersome treatments (Barr, 1996; Ciocon et al., 1992; Dunbar & Neufeld, 2000; Happ, "Using a best practice approach," 2000; Happ, "Preventing treatment interference, 2000; Kayser-Jones & Schell, 1997; Sweeney-Calciano, Solimene, & Forrester, 2003. Evidence Grade = C). For example:
    - Note individual's comfort level and select the least intrusive treatment possible (e.g., use oral feedings instead of intravenous [IVs and nasogastric [NG] feedings).
    - Whatever treatment techniques are used, it is important to explain them to patients/families.
    - Reassess patients frequently and eliminate invasive treatments as soon as possible.
    - Offer an ordered as needed (PRN) medication in time for it to take effect, prior to potentially painful procedures (e.g., bathing) to reduce pain and/or to calm patient.
    - Facilitate weaning to decrease the duration of mechanical ventilation and intubation.
    - Use long sleeve robes or gowns to hide catheter sites.
    - Keep IV solution bags and tubing out of the patient's field of vision.
    - Overdress wounds and using abdominal binders to cover wound dressings whenever possible.
    - Distraction includes watching television, music, keeping patients occupied, and giving them something to squeeze or hold.
- Provide physical activities to diffuse and divert patient behaviors (Carlson & Holm, 1993; Cotter & Evans, 2003; Forrester et al., 2000; Happ, "Using a best practice approach," 2000; Happ, "Preventing treatment interference, 2000; Janelli & Kanski, 2000; Janelli, Kanski, & Wu, 2002. Evidence Grade = C). Recreational activities, exercise, activities of daily living training, physical therapy, and occupational therapy are some of the examples.
- Use reality-orientation and other psychosocial interventions (Dewey & Brill, 2000; Feil, 1992; Spector et al., 2000; Sweeney-Calciano, Solimene, & Forrester, 2003. Evidence Grade = B). Use of reality-orientation in patients with dementia may only frustrate them and the nurse, but orientation strategies can be desirable for delirious patients (Lusis, 2000).
    - Involve patient in conversation.
    - Use active listening to elicit patient's feelings, concerns, and fears.
    - Verbally redirect target behavior.
    - Explain procedures to reduce patient anxiety.
    - Introduce self every time when enter patient's room.
    - Provide written reminder of what hospital and what room the patient is in.
    - Provide reality links available (e.g., radio, calendar, and clock).
    - Use relaxation techniques such as therapeutic touch, massage, warm baths, and warm drinks.
- Provide one-on-one companionship and constant observation (Cotter & Evans, 2003; Dunbar & Neufeld, 2000; Forrester et al., 2000; Happ, "Using a best practice approach," 2000; Happ, "Preventing treatment interference, 2000; Martin, 2002; Sweeney-Calciano, Solimene, & Forrester, 2003; Tinetti et al., 1994. Evidence Grade = C). Experts have suggested that restrained patients actually require more time for nursing care (Mayhew et al., 1999; Sullivan-Marx et al., 1999. Evidence-Grade = D).
    - Nursing staff need to determine whether patient requires one-on-one supervision.

- If one-on-one companionship and constant observation is required, staff, family, friends, or volunteers are potential candidates to provide companionship.
- Educate the family, friend, or volunteer about appropriate interventions to respond to patient behavior.
- Provide increased nursing rounds for patients with a high risk for falls, dementia, or a history of pulling out tubes, lines or catheters, etc.

Psychological Approaches

- Involve family to participate in care (Cotter & Evans, 2003; Martin, 2002; Quinn, 1994. Evidence Grade = D). Family members may be able to interpret the meaning of a patient's behavior. For example, they may be able to interpret the gestures of a patient or explain something that is worrying him/her. Families should be assessed to determine their knowledge and willingness to participate. They should be informed of the interventions that have been implemented to promote patient safety and taught the steps they can take to help, such as providing one-on-one companionship.
- Provide familiar people, things, and activities (Cotter & Evans, 2003; Evans, 1996; Lusis, 2000; Sweeney-Calciano, Solimene, & Forrester, 2003. Evidence Grade = D). For example, encourage audiotapes of family members, place family photographs in the room, reminisce about old times with family, and arrange the same staff for patient care if possible.

Environmental Modifications

- Modify the immediate environment (Cotter & Evans, 2003; Croke & Mayberry, 2001; Dunbar & Neufeld, 2000; Hakim, 1998; Hewawasam, 1996; Martin, 2002; Rader, 1991; Sweeney-Calciano, Solimene, & Forrester, 2003. Evidence Grade = C). For example:
  - Make call light accessible and respond quickly to summons for assistance.
  - Keep the objects necessary for activities of daily living readily at hand (e.g., water, bedpan or commode, call button, hearing aids, pocket talkers, eyeglasses).
  - Provide adequate lighting depending on patient's behavioral response to lighting level.
  - Place patient close to nursing station for closer observation and monitoring unless the stimulation of that active and generally noisy area triggers agitation or worsens confusion. Pressure-sensitive bed alarm pads can also be helpful to monitor patient.
  - Place mattress on the floor or have a lower bed.
  - Leave bedrails down.
  - Reduce excessive noise that tends to provoke behaviors that threaten self or others.
  - Arrange the nursing care schedule to accommodate patient's normal function and usual routines, such as sleeping, eating, and bathing.
  - Assign a consistent caregiver and/or limit the number of people who interact with patient.
  - Develop individualized toileting routines to facilitate elimination and to reduce the risk of falls related to elimination.

- Provide eyeglasses, hearing aides, and other assistive devices so patient can properly interpret environmental stimuli.

Use of Physical Restraints

The standard of care is not to use restraints. As noted earlier, restraint use is potentially dangerous and demeaning for patients (Sweeney-Calciano et al., 2003). Institutions and clinicians should strive to promote restraint-free care while maintaining patient safety. Use physical restraints only when positive, nonrestrictive procedures have failed to produce the desired behavioral change and remove them as soon as possible. When restraints are used, the following standards as well as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standard and your hospital's restraint policy should be followed (Department of Health and Human Services [DHHS], 1999; JCAHO, 2001; Kapp, "Restraint reduction," 1999; Kapp, "Physical restraint," 1999; Sweeney-Calciano et al., 2003. Evidence Grade = D).

- Physical restraints should be considered only after 1) assessment of the patient, the environment, and the situation have been completed (see Assessment Criteria section, above), 2) precipitating factors have been identified and eliminated whenever possible, 3) consultations with other health care professionals have occurred, 4) interventions to relieve discomforting behaviors have been used, and 5) a physician's order for use of restraints has been obtained.
- The use of less restrictive interventions should be attempted frequently/repeatedly and results documented.
- Contraindications to physical restraints should be assessed on a case-by-case basis prior to the use of restraints. For example, for patients with eye or brain surgery, restraints may increase an intracranial pressure or intraocular pressure (Evans, Wood, & Lambert, 2003; Maurel et al., 1996. Evidence Grade = B).
- The patient should have access to a call bell.
- Patients' behavioral status and need for restraints must be frequently assessed.
- If application of restraints is considered necessary, the patient, the patient's family, or the patient's representative should be notified promptly and the restrictive intervention should be clearly explained to them. Informed consent from the patient and/or the patient's family/representative need to be obtained within 24 hours after implementation of restrictive procedures for them to be continued.
- The patient must be continuously monitored and have his/her needs attended to (e.g., eating, hydration, skin care, and toileting).
- Rarely, to protect the patient or staff from imminent injury, restrictive interventions may be implemented by authorized staff. A Licensed Independent Practitioner's (LIP: Physician, Dentist, Podiatrist, etc) written or verbal order must be obtained within one hour after application.
- When a restraint is applied, several elements should be documented. These include 1) type of restraint used, 2) substance of explanations given to the client and support persons, and client or representative's consent, 3) exact times the restraint was applied and removed, 4) client's behavior while the restraint was applied, 5) frequency of care given while the restraint was

applied and removed (e.g., assessment of circulation and range-of-motion exercises), and 6) notification of the physician.

- If for any reason restraints are used, then they need to be removed as soon as possible after the target behavior diminishes or disappears. Criteria for discontinuation:
    a. Improved mental status (most frequent)
    b. Capacity to adhere to a contract regarding expected behavior
    c. Availability of direct supervision
    d. Discontinuation of tubes or lines
- The following actions and rationale (see Table below) are designed to guide clinicians in monitoring and documenting the use of physical restraints.

Table. Monitoring and Documenting the Use of Physical Restraints

ACTION	KEY RATIONALE
1. If the patient's specific behaviors continue despite attempts to eliminate causal factors, then use of a physical restraint may be applied as a last resort.	1. Documentation should reflect that: a. This intervention is clinically justified. b. Other less restrictive interventions have been attempted first (e.g., reclining chair, padded furniture). c. The patient's condition has been taken into consideration. d. A licensed independent practitioner's order for use of a physical restraint has been obtained.
2. A physician's order is required: a. The order is time limited. However implementing the time-limited order does not require applying the restraint for the entire period if the patient's target behavior diminished or disappears. b. The order is written for a specific episode (i.e., it cannot be written for an unspecified time for future use). Staff members who initiate or terminate restraints should be properly trained to do so. c. Specifies start and end time. (The physician must state the type of restraints, reason for use, and the times to be	

ACTION	KEY RATIONALE
used.) d. The maximum length of time for a specific order is 24 hours. e. Physician assessment and new order are needed if the restraint order expires.	
3. If during an early release period the patient's behavior, which led to the original order, escalates again, the restraints may be reapplied without a new order.	3. a. The medical record must clearly describe that the escalating behavior is part of the same episode that prompted the initial order. b. The total restraints time does not exceed the length of time contained within the physician's original order.
4. A new physician order is required: a. For a different behavior b. If the restraint is needed past the time limit c. Every 24 hours	
5. If physical restraints are applied, patient will need to be observed by a nurse every 15 minutes.	5. Visual observation should include patient's clinical condition, orientation checks, correct placement of restraints, and circulation, motion, and sensation checks of the affected extremity.
6. The patient will be released from the restraint at least every two hours in 24 hours.	6. a. The purpose is to give the patient an opportunity for hydration, eating, toileting, exercise, and other activities of daily living. b. Time of restraint release and activities occurring during the release period need to be documented.

(Bower, McCullough, & Timmons, 2003; Croke & Mayberry, 2001; DHHS, 1999; JCAHO, 2001; Karlsson et al., 2000; Martin, 2002; Sullivan-Marx, 2001. Evidence Grade = D)

Definitions:

Evidence Grading

A. Evidence from well-designed meta-analysis
B. Evidence from well-designed controlled trials, both randomized and nonrandomized, with results that consistently support a specific action (e.g., assessment, intervention or treatment)
C. Evidence from observational studies (e.g., correlational, descriptive studies) or controlled trials with inconsistent results
D. Evidence from expert opinion or multiple case reports

CLINICAL ALGORITHM(S)

A clinical algorithm is provided in the original guideline document for Behavior Management and Restraint-Free Care.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for selected recommendations (see "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Better understanding of the reason for behavior can lead to individualized interventions that eliminate restraint use while maintaining patient safety.

POTENTIAL HARMS

Not stated

CONTRAINDICATIONS

CONTRAINDICATIONS

Contraindications to physical restraints should be assessed on a case-by-case basis prior to the use of restraints. For example, for patients with eye or brain surgery, restraints may increase an intracranial pressure or intraocular pressure

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

This evidence-based practice protocol is a general guideline. Patient care continues to require individualization based on patient needs and requests.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The "Evaluation of Process and Outcomes" section and the appendices of the original document contain a complete description of implementation strategies.

IMPLEMENTATION TOOLS

Audit Criteria/Indicators
Chart Documentation/Checklists/Forms
Clinical Algorithm
Staff Training/Competency Material

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Park M, Hsiao-Chen Tang J, Ledford L. Changing the practice of physical restraint use in acute care. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation and Dissemination Core; 2005 Nov. 47 p. [146 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005 Nov

GUIDELINE DEVELOPER(S)

University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core - Academic Institution

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GUIDELINE COMMITTEE

University of Iowa Gerontological Nursing Interventions Research Center Research Development and Dissemination Core

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Authors: Myonghwa Park, PhD, RN; Jane Hsiao-Chen Tang, PhD, RN; LaHana Ledford, MA, RN, GNP, CNS

Series Editor: Marita Titler, RN, PhD, FAAN

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Ledford L, Mentes J. Restraints research-based protocol. In: Titler MG, editor(s). Series on evidence-based practice for older adults. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 1997 Sep. p. 83.

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core, 4118 Westlawn, Iowa City, IA 52242. For more information, please see the University of Iowa Gerontological Nursing Interventions Research Center Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The original guideline document and its appendices include a number of implementation tools, including a behavior log, outcome and process indicators, staff competency material, and other forms.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on March 14, 2006. The information was verified by the guideline developer on April 12, 2006.

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